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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA-08810 (June 2003)
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06/03

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SECTION 08810

GLASS
06/03

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NOTE: Delete, revise, or add to the text in this section to cover project requirements. Notes are for designer information and will not appear in the final project specification.

This broadscope section covers single-glass lights set in metal or wood sash.

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PART 1 GENERAL

1.1 REFERENCES

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NOTE: The following references should not be manually edited except to add new references. References not used in the text will automatically be deleted from this section of the project specification.

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The publications listed below form a part of this section to the extent referenced:

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 800	(1992) Voluntary Specifications and Test Methods for Sealants

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z97.1	(1984; R 1994) American National Standards for Safety Glazing Material Used in Buildings - Safety Performance Specifications and Methods of Test

ASTM INTERNATIONAL (ASTM)

ASTM C 1036	(1991) Standard Specification for Flat Glass

ASTM C 669	(1995) Standard Specification for Glazing Compounds for Back Bedding and Face Glazing of Metal Sash
ASTM C 920	(2001) Standard Specification for Elastomeric Joint Sealants

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS TT-P-00791	(Rev B; Am 2) Putty; Linseed-Oil Type, (For Wood-Sash-Glazing)

UNDERWRITERS LABORATORIES (UL)

UL Bld Mat Dir	(1999) Building Materials Directory

1.2 SUBMITTALS

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NOTE: Review submittal description (SD) definitions in Section 01330, "Submittal Procedures," and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control. Include a columnar list of appropriate products and tests beneath each submittal description.

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The following shall be submitted in accordance with Section 01330, "Submittal Procedures," in sufficient detail to show full compliance with the specification:

SD-03 Product Data

Manufacturers catalog data shall be submitted for the following items:

Clear Glass
Tinted Glass
Tempered Glass
Figured Glass
Glazing Units
Fire-Rated Wired Glass
Glazing Compound
Elastomeric Sealing Compound
Glazing Tape
Wood Sash Putty
Blocks and Spacers

SD-07 Certificates

Certificates shall be submitted for the following items showing

conformance with the referenced standards contained in this section.

Tempered Glass
Fire Rated Wired Glass

1.3 DELIVERY, STORAGE AND HANDLING

Manufactured glass units shall be delivered and stored until installation in the manufacturer's container's and shall be clearly marked on the exterior as to type, and quantity of units.

When special moisture protection is required, glass shall be stored in accordance with the manufacturer's recommendations.

PART 2 PRODUCTS

2.1 GLASS MATERIALS

2.1.1 Clear Glass

Glass shall be plate or float type conforming to ASTM C 1036, Type I, Class 1, Quality q3.

2.1.2 Tinted Glass

Glass shall be plate or float type conforming to ASTM C 1036, Type I, Class 3, Quality q3. Tint shall be [light green] [gray] [bronze].

2.1.3 Tempered Glass

Tempered glass shall conform to ANSI Z97.1 and shall bear the ANSI safety glass marking.

Glass before tempering shall be the plate or float type conforming to ASTM C 1036, Type I, [Class 1, Clear] [Class 3, Tinted], Quality q3. Tint shall be [light green] [gray] [bronze].

2.1.4 Figured Glass

Glass shall be rolled type conforming to ASTM C 1036, Type II, [Class 1 (Translucent)] [Class 3, (Tinted)], Quality q8 (Glazing), Pattern p3 (Random), Finish f1 (patterned one side).

2.1.5 Glazing Units

Factory fabricated units shall be two panels of clear plate or float glass separated by a dehydrated air space, hermetically sealed.

2.1.6 Fire-Rated Wired Glass

Glass shall be UL approved for fire windows and doors, shall be listed in the UL Bld Mat Dir, Guide Designation KCMZ, and shall bear the UL listing and marking. Thickness shall be 1/4 inch 6 millimeter. Glass shall

conform to ASTM C 1036, Type II, Class 1, Form 1, Mesh [m1] [or] Mesh [2].

2.2 GLAZING MATERIALS

2.2.1 Glazing Compound

Elastic glazing compound shall conform to ASTM C 669.

Color of the glazing compound shall match the color of the sash as closely as possible.

2.2.2 Elastomeric Sealing Compound

Compound shall be one-component, nonsag, elastomeric type conforming to ASTM C 920. Compound shall match the color of the sash as closely as possible.

2.2.3 Glazing Tape

Tape shall be non-skinning, non-oily, reinforced class, butyl- or polyisobutylene-base resilient preformed compound conforming to AAMA 800.

2.2.4 Wood-Sash Putty

Putty shall be the pure linseed oil type conforming to FS TT-P-00791, Type I.

2.2.5 Resilient Setting Blocks and Spacers

Blocks shall be solid chloroprene elastomeric extrusions having a Shore A durometer hardness between 70 and 90. Thickness shall be approximately the same as the glass-edge clearance dimension; the length shall be 4 inches 100 millimeter, minimum.

Spacers shall be solid chloroprene elastomeric extrusions having a Shore A durometer hardness between 40 and 50. Spacers shall be 2 to 3 inches 50 to 80 millimeter long with thickness and height to suit the application.

2.3 CLEANING SOLUTIONS

All cleaning solutions shall be compatible with the glazing materials and as recommended by the glass manufacturer or fabricator.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

3.1.1 Examination

Prior to installation, examine glass and glazing materials and correct defects which may adversely affect glazing work.

3.1.2 Preparation

Glass and glazing surfaces shall be cleaned prior to installation to remove foreign matter, glazing compounds, special coatings, dust, oil and contaminants and wipe dry.

3.2 INSTALLATION

Glass shall be installed in accordance with the manufacturer's printed instructions and as specified.

Operable sash shall move freely and properly in the frame of the unit prior to the start of glazing. Movable items shall be securely fixed or in a closed and locked position until the glazing material has set.

Sizes and proper edge clearances shall be determined by measuring the actual unit to receive glass. Each piece of glass shall bear the manufacturer's label to identify its type as well as thickness and quality. Labels shall not be removed until final approval is obtained.

3.3 GLASS PROTECTION

Glazed openings shall be identified during the construction period by tapes or flags that are not in contact with the glass.

Temporary labels shall be removed after the glass and glazing work has been approved.

3.4 CLEANING

Upon completion of work, glass surfaces shall be cleaned and shall be free of glazing- or sealing-compound, smears, and other defacement.

-- End of Section --